DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-015508 Address: 333 Burma Road **Date Inspected:** 09-Jul-2010

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: Chen Xi. **CWI Present:** Yes No Yes **Inspected CWI report:** N/A **Rod Oven in Use:** Yes No No N/A Yes N/A **Electrode to specification:** No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No N/A **Delayed / Cancelled:**

34-0006 **Bridge No: Component:** OBG

Summary of Items Observed:

On this day CALTRANS OSM Quality Assurance Inspector (QA) Shailesh Wadkar was present during the times noted above for observations relative to the fabrication of the Self Anchored Suspension (SAS) Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island, in Shanghai, China. QA observed and/or found the following:

Bay 1:

This QA Inspector observed the following work in progress:

Flux Cored Arc Welding (FCAW) of OBG component – Traveler Rail; weld joint: 20TR2-052-011. Welder is identified as 216575. ZPMC Quality Control (QC) is identified as Tian Lei. The welding variables recorded by QC appeared to comply with the Applicable WPS: WPS-B-T-2231-TC-U5-1G.

Repair welding of OBG component – Traveler Rail; weld joint: 20TR1-047-001. Welder is identified as 216872. ZPMC QC is identified as Ai Wei. The welding variables recorded by QC appeared to comply with the Applicable WPS: WPS-345-FCAW-1G(1F)-Repair-1 (as per Welding Repair Report (WRR): B-WR-13878, Rev-0)

Heat straightening of OBG component – Traveler Rail; weld joint: 20TR2-028. Heat straightening was done as per Heat Straightening Record (HSR): HSR (B)-362 Rev-1 Dt: 04/18/10. ZPMC QC is identified as Ai Wei. Heat straightening was done to correct the distortion due to welding.

Photo attached for reference.

WELDING INSPECTION REPORT

(Continued Page 2 of 3)

Bay 2:

FCAW of OBG component - Floor Beam; weld joint: FB3197-001-017/018 & 043/044. Welder is identified as 045209. ZPMC QC is identified as Zhong Yang Gang. The welding variables recorded by QC appeared to comply with the Applicable WPS: WPS-B-T-2132-3.

FCAW of OBG component - Floor Beam; weld joint: FB3175-057/058. Welder is identified as 045276. ZPMC QC is identified as Zhong Yang Gang. The welding variables recorded by QC appeared to comply with the Applicable WPS: WPS-B-T-2132-3.

Bay 3:

This QA Inspector observed the following work in progress:

Submerged Arc Welding (SAW) of OBG component – Longitudinal Diaphragm; weld joint LD3028-001-001. Welder is identified as 058100. ZPMC QC is identified as Wang Liang. The welding variables recorded by QC appeared to comply with the Applicable WPS: B-T-2221-B-L2c-S-2. Photo attached for reference.

SAW of OBG component – Longitudinal Diaphragm; weld joint LD3029-001-001. Welder is identified as 044771. ZPMC QC is identified as Wang Liang. The welding variables recorded by QC appeared to comply with the Applicable WPS: B-T-2221-B-L2c-S-2.

Outside Yard:

CB13:

Notification no: 006161.

This QA inspector performed Magnetic Particle Testing (MT) of approximately 15% of an area that has been previously tested and accepted by ZPMC QC personnel. This QA Inspector has generated MT report for this date. The member(s) are identified as OBG component – Cross Beam 13. The weld designations reviewed are as follows:

- 1) CB202G-037-139/157.
- 2) CB202G-040-081/082.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

WELDING INSPECTION REPORT

(Continued Page 3 of 3)





Summary of Conversations:

Only general conversation was held between QA and QC concerning this project.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang; phone: 15000422372., who represents the Office of Structural Materials for your project.

Inspected By:	Wadkar,Sailesh	Quality Assurance Inspector
Reviewed By:	Hall,Steven	QA Reviewer